KANSAS MEDICAL JOURNAL.

VOL. VII. TOPEKA, KANSAS, SATURDAY, NOVEMBER 2, 1895. No. 44.

ORIGINAL ARTICLE.

Purpura.

BY J. W. NEPTUNE, M.D., CHAPMAN, KAS.

Read before the Golden Belt Medical Society, at Solomon, Kas., October 3, 1895.

Purpura is classed under affections of the skin, and is characterized by the development of variously sized and shaped, smooth, reddish or purplish hemorrhagic patches, which may or may not be elevated above the surface, and which do not disappear under pressure.

Of late years our knowledge of the clinical history of purpura has been greatly increased by numerous reports on the subject, with histories of cases.

A great many varieties and subdivisions of the disease have been described, complicating rather than simplifying the subject.

Many theories have been advanced regarding the etiology and pathology of this affection, but very little real advance in our knowledge of these aspects of the disease has been gained.

We find the chief predisposing cause, so far as known, to appear to be, derangements of the digestive organs, scurvy, hæmophilia, want of support of the vessels due to the relaxation of the tissues after long illness, etc.

Diseases of the viscera, of the spleen, liver, kidneys, and cardio-vascular system, diseases of the nervous system, acute septicœmia, pyemia and syphilis—these causes are said to produce idiopathic purpura.

Besides the causes given above, purpura is said to be caused sometimes from the ingestion of certain drugs, as iodine, quinine, salicylic acid, belladonna, chloral, chloroform, phosphorus, the mineral acids, and benzoic acid inhalations.

These latter causes are said to cause symptomatic purpura.

I think in most cases of idiopathic purpura, no predisposing cause can be adduced.

Purpura is more common in females than in males, and is decidedly more common among the young. According to statistics, 50 per cent. of all cases under twenty years of age.

Very little more is known of the pathology than of the etiology of purpura, the immediate cause of the extravasation of the blood is probably to be found either in some change in the blood itself, some alteration in the structure of the vessels, or some fault of innervation.

Setting aside the symptomatic forms of the disease, I shall consider those forms which are properly called idiopathic.

These are customarily divided into purpura simplex and purpura hæmorrhagica, and these two divisions are supposed to include all cases, but as I said in the first part of this paper, a great many varieties and subdivisions of the disease have been described, and I shall give the names at least with a few of the most important symptoms of some varieties.

We first have the two grand divisions named above, purpura simplex and purpura hœmorrhagica. Then the subdivisions, purpura urticans, purpura rheumatica, purpura neonatorum, purpura similis. The infectious variety, and the fulminant form.

In purpura simplex the first symptom is the appearance of a number of hæmorrhagic spots varying in size from a pin point to a split pea, generally unaccompanied by any subjective symptoms whatever. The spots are of a bright or dark red color, and if only

a few hours old may be slightly raised above the surface, and may partly disappear under pressure.

The locality chiefly affected by the eruption is the surface of the legs, to which, indeed, it may be confined. The feet, including the soles, the thighs, buttocks, scrotum, and prepuce, are the localities next and most frequently affected. Of the upper part of the body, the forearms are the most commonly invaded. The trunk and face are generally spared. As was stated before the eruption gives rise to no subjective symptoms, although there is occasionally a slight epistaxis.

There is no pain, heat or itching in the diseased patches, the pulse is natural. The respiration, the digestion, the excretions, and the nervous functions are all normal.

The duration of purpura simplex is variable. If the patient remains in bed there may be only a few successive crops of lesions, but if the patient is about on his feet new crops may come out daily, and the disease may continue indefinitely.

Purpura hæmorrhagica, a severer form than purpura simplex, may occur either in persons enjoying apparently the best of health, where it manifests itself suddenly, or in persons of depressed vigor and poor health, where it appears slowly and in a chronic form.

As has been remarked, the predisposing causes are not accurately known. Cold weather, and cold and damp dwellings, seem to be the only predisposing conditions which are generally accepted as inducing purpura hæmorrhagica.

The severer forms of purpura are usually ushered in by some precursory symptoms. A feeling of weight in the head, pain in the limbs, and generally malaise. The eruption, when it appears, is first seen upon the lower extremities, and later comes out on the trunk, the arms and even the face. The lesions are similar to purpura simplex, but in addition to the small patches, larger areas are also observed. The lesions are more sudden, more numerous and general in appearance and last longer.

The symptoms usually considered to mark the difference between purpura simplex and purpura hemorrhagica is the occurrence of hemorrhages into the mucous membranes in the latter disease. These are not always present even in severe and fatal cases, but when they do occur add to the gravity of the prognosis. When the stools contain blood this is usually dark and grumous, rarely pure and bright red. Hæmaturia is marked by discoloration with clots.

In connection with purpura, especially with the severer forms, edema, circumscribed or general, may occur and form a marked symptom.

Recently masses of bacteria have been found in the ecchymotic patches of purpura, and the occurrence of a number of cases simultaneously, has given rise to the term "infectious purpura."

In purpura urticans itching is a marked symptom of the disease, sometimes a small urticariel wheal appears, and shortly after a hemorrhagic spot appears in the center of the lesion, which gradually sinks to a level with the skin, leaving the simple purpuric stain behind it.

Purpura rheumatica—by some observers this affection has been considered a purpura due to or accompanying rheumatism. Others consider the joint pains to be simply the result of hemorrhagic effusions into the serous membranes of the joints. But be that as it may, in the affection bearing this name, rheumatoid pains about the joints constitute a very marked accompaniment.

A variety of the socalled purpura rheumatica is that not unfrequently met with, when, in addition to the rheumatoid pain, there is violent epigastric pain, colic, and pain in the back, often followed by bloody vomiting.

In rare cases the large effusion of blood in the skin give rise to gangrene, and this may happen at various points, on the face as well as on the limbs; death, or recovery with hideous cicatricial deformity, is the rule.

The most fatal, and fortunately most rare, form of the disease is called "fulminant purpura," only seven or eight cases having been reported, all of which proved

fatal. This form of the disease runs its course in a few hours. A typical case I saw reported lasted just ten hours from the first appearance of the ecchymoses.

The diagnosis of purpura is not usually difficult. No other disease is characterized by the appearance of hemorrhagic patches which do not disappear under pressure, and which are without some definite local or general cause to account for them.

It is important to distinguish between idiopathic purpura and that due to the ingestion of drugs, the latter generally disappearing on the withdrawal of the offending drug.

The prognosis of purpura varies greatly between that of the benign and almost trifling purpura simplex, and the almost certainly fatal infectious and fulminant varieties.

The variety known as purpura rheumatica, when, in addition to the pain and swelling of the joints, severe epigastric pain, colic, and constipation, followed by hæmatemesis and bloody stools intervene, the prognosis is very grave, and when large areas become ecchymosed, especially where the face is attacked and gangrene threatens, the prognosis is much more serious. When there is bleeding from the mouth, and still more when there is epistaxis, the prognosis is grave.

The treatment of purpura must depend somewhat upon the patient's general physical condition and surroundings. Tonics, fresh air, good food and stimulants must often be at once prescribed. It is of the utmost importance that the patient be kept quiet and in bed. The diet should be simple and nourishing. A pure milk diet is often best; in some cases laxatives are required, and preferably castor oil. This may be employed when the stools contain blood, especially if the blood is coagulated or much altered. When there is great thirst ice may be given in small pieces, letting it dissolve in the mouth.

Among the more specific remedies may be mentioned dilute sulphuric acid, belladonna, arsenic, and quinine. Turpentine is of great value in some cases. Ergot by the mouth or ergotin by the hypodermic method are of great use if there is much hemorrhage. Iron should not be given if there are any inflammatory symptoms, but should be given in convalescence to overcome the anæmia which is always present. Inunctions of cod-liver oil are said to be of great value while the disease is at the worst stage and also during convalescence.

Tinea Circinata.

BY W. E. WEHE, TOPEKA.

Read before the Topeka Academy of Medicine and Surgery.

In presenting to you this paper I will apologize for taking what is seemingly so simple a topic. The order in which things are put may not agree with the ideas of some of the members present, but every one cannot be suited, so I will take my own way about the arrangement.

Tinea trichophyton is usually divided into three parts—tinea circinata, tonsurans and lycosis. Each of these, according to some authors, have one or more subdivisions. All three are regarded as a modification of one disease and produced by the trichophyton fungus. Although produced by one cause, each have distinctive features which will entitle them to separate descriptions.

The one of which I will speak is the tinea circinata. It is defined by Duhring as a contagious, vegetable parasitic disease, due to the trichophyton characterized by one or more circular or irregularly-shaped, variously sized inflammatory, slightly vesicular or squamous patches occurring upon the general surface of the body. This general definition is broad enough to cover any and all cases of this disease that may come up.

The degree of development of the disease varies greatly. It may be trivial or extensive, or chronic or obstinate. That it is contagious no one will deny, and it is very easily transplanted from one part of the body to the other or one person to another. The bed-fellow of a person with the disease is very apt to take his turn. Two cases

with this kind of a history impressed this very forcibly upon my mind.

The disease is usully trivial when taken early. In acute cases it appears in small, round, sometimes irregular, well defined spots.

As the trouble advances the affected part becomes more inflamed, forming minute papules or vesicles around the outer edge, the inner surface giving off branny scales.

Should the disease become chronic, it will appear in small scaly blotches, either even with or slightly elevated above the surface of the skin. It may seemingly disappear for a time, and then when the fungus gets a new start will reappear, covering years in this manner. The fungi are scanty in these cases.

The parts of the body usually affected are in this order; Face, neck and hands; in the body, axilla, inner part of thighs, nates or groin.

The disease to which Hebra gave the name "eczema marginatum," encountered in cavalrymen and others, occurring in women as well as in men, found chiefly about the forks of the thighs, buttock or axilla, Duhring thinks, is only a severe form of tinea circinata. It may be complicated secondarily by eczema. This is shown by the marked dermatitis and severe itching. The disease, in these cases, is inclined to be chronic and rebellious to treatment.

Climate has much to do with the severity of the trouble. It being more severe in hot than in temperate climates. In this country the cases are comparatively milder than those in Europe, and in consequence yield more readily to treatment.

Tinea circinata, when contracted from animals, is more severe than when contracted in the usual manner; i. e., from man to man. Meguin mentions cases contracted by the soldiers from sleeping on blankets used on horses with the disease. These cases were stubborn and severe.

In this line I can give my experience, having contracted a ring-worm on my wrist while treating a horse. It seemingly yielded to treatment, the skin becoming smooth, only to find the disease reappear in a few days after treatment was stopped I generally got a cure by keeping a cloth covered with an ointment, bandaged to the wrist. The fungus was discovered by Bazin in 1854. Its botanical relations was studied by Dr. J. E. Atkinson, of Baltimore. The fungus belongs to the mucors and is probamucor mucedo.

It finds lodgment in the epidermis and permeates in all directions. The part involved is the corneous layer and this tissue only.

First there is hyperemia, then inflammation with papulation, vesiculation and desquamation. The scales are thin, shriveled, adherent, yellowish, and not as a rule abundant. Under the microscope you find the fungus imbedded in the epidermis in the form of mycelium and spores,

The mycelium consists of long, slender, sharply contoured, pale, grayish ribbon-like formations containing spores or granules. It is branching and irregularly jointed, one thread often covering the entire field. The diameter varies from .0018 m.m. to .0026 m.m.

The spores, round grayish bodies are found singly or in chains of two or more. Sometimes they are attached to the mycelium, sometimes isolated. The growth of the mycelium, as a rule, is not luxuriant.

If the case is chronic and accompanied with chronic inflammation, the fungus is difficult of detection.

In typical cases the diagnosis is easy. In atypical and chronic cases one has to differentiate between this and eczema, seborrhœa, psoriasis as it is disappearing, and syphilis. By considering the history and using the microscope one is not apt to make a mistake.

The slide for the microscope must be carefully prepared.

Prognosis usually favorable for a rapid case, but in old cases sometimes months are needed to accomplish this end.

The treatment is local, except where the patient is debilitated and the disease is persistent.

Case—August 30, 1894: E., age 11 years, pale anemic area on forehead about size of silver dollar. Diagnosis: Tinea circinata.

℞: A tonic and an ung. of chrysophanic acid ʒss to ʒi. Did not see patient until December 6, 1894. Instead of getting the ℞ filled they had applied common soap. Besides allowing the disease to extend over forehead and face involving eyelids, nose, ears and upper lip they had produced an eczema. The face showed eczema, madans and subrune, and presented the appearance more like the granulations of an old varicose ulcer than any other thing. The parts were thoroughly cleansed and a soothing ointment was applied.

Ten days later the father reported the child better. The disease had ceased to spread and the margins began to look more like normal. The child continued to improve slowly, but was not entirely well February 5, 1895. Will add that there was a typical ring-worm in axilla and in thigh.

The Nurse and Contagious Diseases.

Nursing World.

The question as to the liability of nurses to infection while in attendance upon cases of diphtheria, tuberculosis and other contagious diseases is an important one. A few years ago a careful inquiry into the matter in Germany revealed the fact that infectious diseases levied an excessive tax upon the nurses of that country each year. It was found that the percentage of deaths from tuberculosis was much higher among the nursing sisters than among the citizens of the towns in which they lived. A similar inquiry at the present time would probably show that increased knowledge of the contagiousness of tuberculosis has effected a gratifying improvement in the death rate from this disease.

It is well, now and then, for nurses and physicians to ponder this matter of contagion from cases they nurse or attend. On the other hand, we believe excessive squeamishness or inordinate fear is not only reprehensible, but really incapacitates one for the performance of his or her duties. We once heard of a doctor who was so timid about approaching a case of diptheria that the neighborhood declared he felt the pulses of diptheritic patients with a pair of tongs. Between this point and the opposite one of foolhardiness there is a golden mean which nurses and physicans should seek.

Methods of prevention should be intelligently and systematically carried out. In examining the throat of a child afflicted with diphtheria care must be exercised that the patient does not cough out particles of memberance into the face, or upon the clothes of the examiner. It is well also to hold the breath while making an examination of the throat—ten or twelve seconds being usually sufficient for one inspection; in addition to this we may, by properly regarding the laws of hygiene, keep our own bodies in such a healthy and vigorous state that disease-germs do not find to us a suitable nidus for propagation.

Headache in Children.

Annals de Med.

This constitutes one of the most frequent of affections; they awaken anxiety, especially where there is any tendency to meningitis.

Headaches of "growth" are frequent in children who have grown fast in a relatively short time. They are accompanied with joint pains and swelling around the epiphyseal junctions, and frequently a slight degree of cardiac hypertrophy.

Rest is the best remedy. Headache is often due to overtasking the mental powers. Here again rest is the cure, combined with regular exercise. Headache due to digestive disorders requires attention to the functional condition combined with the use of baths and exercise.

Where disorder of the nervous system is the cause, as shown by hysteria, or epilepsy. antipyrine and bromides are useful.

Headache due to beginning meningitis is rebellious to all treatment. A possible cause of headache, which should always be considered, is syphilis, inherited. Chlorosis is also a cause of cephalalgia, and is treated in the usual way by iron and hygienic means. Headache often results from Bright's disease also.

Kansas Medical Journal.

PUBLISHED WEEKLY

BY THE MEDICAL PUBLISHING COMPANY.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:

Per annum, in advance..... $1 00
Single copies..... 15 cents

Subscription may begin at any time. The safest mode of remittance is by bank check or postal money order drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in Registered Letter. Address

KANSAS MEDICAL JOURNAL,
631 Kansas Avenue.

W. E. McVEY, B.S., M.D., EDITOR.

COLLABORATORS:

J. E. MINNEY, A.M., M.D., Topeka, Kas.
S. G. STEWART, M.D., Topeka, Kas.
J. C. McCLINTOCK, A.M., M.D., Topeka, Kas.
M. B. WARD, A.M., M.D., Topeka, Kas.
W. S. LINDSAY, M.D., Topeka, Kas.
JOS. B. CONNELL, B.S., LL.B., M.D., Kansas City, Mo.

Topeka, Kansas, Saturday, Nov. 2, 1895.

Why?

We read reports from prominent men on the remarkable results obtained from the use of antitoxin and possibly in the same week we are informed by other prominent men of its dangerous properties and its total inefficacy for good. By one author we are told that by its use the death rate in diphtheria has been greatly lessened; by another we are informed that it has not diminished the death rate. And we, on reading these absolute contradictory statements, naturally say "Why?" Why is it that we should have absolutely contradictory statements upon the effect of antitoxin in diphtheria? Why is it that we are accused as criminal if we fail to use antitoxin, and accused in the same manner if we use it? We have published a number of reports favoring the use of antitoxin. We publish in this number some opinions of the opposing faction.

Can there be such marked variation in results obtained from one remedy, or is the difference of opinion due to a natural antagonism in the profession? It seems a little strange that a remedy used in the same way by a large number of practitioners should give results so much at variance. It is not strange that those who have had a limited or no experience with antitoxin should be doubtful of its benefit and this doubt is rather increased than lessened by the prevailing opposing opinions. Both cannot be entirely wrong, nor is it probable that either side is positively right. The tendency to radicalism in the profession does not diminish, and to this we may lay a good deal of the present discussion. Claims are made for new preparations which are exorbitant and unwarranted, and a failure to substantiate these claims in any particular leads to speculation and doubt. The physician who has followed other plans of treatment in diphtheria and who had a lower death rate than that claimed for antitoxin is naturally loth to change his treatment. His results may be due to the character of his cases, the surroundings or the care rather than his treatment, but that some of our country practitioners do have a remarkable record with diphtheria we cannot question. They are not ready to adopt a new plan of treatment which has not a general commendation.

THE officers of the Association of American Medical Colleges may admit students this year for a three-year course. This decision, coming as it did long after a large majority of the colleges had already announced a three years' course, indicates failing health and looks as if the rules of the Association would hereafter be made after the catalogues appear. The possibility of a united action upon a four-year course has practically vanished with the ac-

tion of the Association. A few colleges which have worked for a higher standard will maintain their four-year course, but it will be at the expense of numbers, and it is a question if they will not be forced by the majority to yield. Much good was expected of the Association, but it looks now as if its sun had set.

Special Fields.

It is a wise saying that to be a good specialist one should first be a good general practitioner, yet there are fertile fields in medicine for special work. Very few general practitioners are able to cope with the great variety of skin diseases. The eye, with its delicate anatomy, is a terror to the man whose special instruction in this line has been limited. An examination of the nose and throat is a matter of speculation without proper instruments and experience in their use. Diseases of the rectum are usually a much neglected source of annoyance to the general practitioner and to the specialist a source of pleasure and profit. Diseases of the mind are from necessity relegated to the field of specialism.

Specialists in these departments of medicine take nothing from the general practitioner, they simply catch the drippings.

There is another class of specialist who, from long experience and much study have acquired particular skill and great reputation in certain classes of disease, but this class is wholly distinct from the specialist who, from taste or adaptability selects some particular branch of work. Many follow special lines because they believe it to be more remunerative, but we must remember that it is not the field we work in that makes the money but it is the work we do. There are some specialists who are coining wealth, there are others whose income will not equal that of the average general practitioner.

The opportunities for specialists are growing fewer and poorer all the time. The numerous polyclinics and special schools are affording an opportunity for instruction in special branches, of which a great many country practitioners are taking advantage. And how many cases which were formerly sent to the city for treatment are treated at home. The specialist may well envy the general practitioner who has an established business and a good income.

WANTED—A young physician who is a graduate of pharmacy or can register and can loan employer seven hundred and fifty dollars ($750) for six months. Note secured by drug stock. Steady job with good salary. Address "Pedra," care KANSAS MEDICAL JOURNAL.

A PHYSICIAN with first class diploma and large experience can secure partnership in an excellent cash office business by addressing Lock Box 275, Oklahoma City, O. T.

Society Meeting.

Buffalo Medical Journal, November, 1895.

The American Association of Obstetricians and Gynecologists held one of its most interesting and satisfactory meetings at Chicago, September 24, 25 and 26, 1895. The attendance of members was large. Numerous papers were read relating to obstetrics, gynecology and abdominal surgery and the discussions, as usual in this association, were spirited, forceful and instructive.

The president, Dr. J. Henry Carstens, of of Detroit, administered the affairs of the association with great discretion, facilitating the transaction of the large amount of business before it with thoroughness and despatch.

The following-named were elected officers for the ensuing year: President, Dr. Joseph Price of Philadelphia; vice presidents, Drs. Albert Hawes Cordier of Kansas City, and George Sherman Peck of Youngstown, O.; secretary, Dr. William Warren Potter of Buffalo; treasurer, Dr. Xavier Oswald Werder of Pittsburg; executive council, Drs.

Charles A. L. Reed of Cincinnati, James F. W. Ross of Toronto, Albert Vander Veer of Albany, Lewis S. McMurtry of Louisville, and J. Henry Carstens of Detroit. Seventeen new Fellows were also elected.

The ninth annual meeting was appointed to be held in Richmond, Va., Tuesday, Wednesday and Thursday, September 15, 16 and 17, 1896. Resolutions of thanks were passed as follows: First, to Dr. J. B. Murphy, chairman of the committee of arrangements, for the efficient manner in which he had provided for the comfort of the Fellows during the meeting and for the delightful yacht sail tendered the Fellows and guests of the association; second, to the Chicago Gynecological Society, for many courtesies tendered; and third, to Messrs. Breslin and Southgate, proprietors of the Auditorium hotel, for the free use of a splendid parlor in which the meeting was held, and for courteous attention to the Fellows who were guests in the house.

Coffee Poisoning.

The Sanitary Era.

The strong "black coffee," to which the French are addicted, and which is drunk before the volatile essence of the drug is allowed to escape, begins to bring forth serious results which attract the notice of the medical authorities in France. If anybody has the curiosity to look through the shop window of a Paris laundress (says the *St. James Gazette*) he will probably see it crowded with female figures moving their arms backward and forward like frantic marionettes. If he concludes that they have recently been "wound up" with coffee, he is not likely to be far wrong. It was the large number of laundresses, showing the same symptoms, who had recourse to hospital treatment, that caused the attention of Dr. Gilles de la Tourette and others to be searchingly directed upon the immoderate use of coffee. They were not long in coming to the conclusion that coffee was responsible for a great deal of disease that had been commonly attributed to the abuse of alcohol. For instance, a form of dyspepsia arising from excessive coffee drinking or tea drinking produces phenomena hardly to be distinguished from those of alcoholic gastritis. The worst case of coffee poisoning is described by the french doctors as *cachexie cafeique*. The patient is then so emaciated that he is like a living skeleton, he is troubled with terrible dreams and hallucinations, and when not under the influence of a recent dose of his favorite stimulant, the general depression is such that the pulse may not give more than fifty beats in a minute.

Tendon Grafting—A New Operation for Deformities Following Infantile Paralysis, with Report of a Successful Case.

Samuel E. Milliken, M.D., New York, Surgeon-in-Chief of the New York Infirmary for Crippled Children; Surgeon to the Infants' and Children's Hospitals.

At the meeting of the New York State Medical Association, October 15th, 1895 (*Medical Record*, October 26), Dr. Milliken presented a boy 11 years of age, upon whom twenty months before he had successfully grafted part of the extensor tendon of the great toe into the tendon of the tibialis anticus muscle, the latter having been paralyzed since the child was eighteen months old.

The case which was presented showed the advantages of only taking part of the tendon of a healthy muscle which was made to carry on the function of its paralyzed associate without in any way interfering with its own work.

The brace which had been worn since two years of age was left off, the patient walked without a limp, the talipes valgus was entirely corrected, and the boy had become quite an expert on roller skates.

Dr. Milliken predicts a great field for tendon grafting in these otherwise hopeless cases of infantile paralysis, who heretofore have been doomed to the wearing of braces all their lives.

640 Madison avenue, New York.

The Piles.

Medical World.

The Piles! Aha! I know them well,
Each feature, tho' I may not see 'em,
Old foes which fume and fret and swell,
And vex and plague my perineum.

You blush at mention of a pile,
And would, perhaps, the theme avoid.
Well, then, suppose, to put on style,
We call the thing a hemorrhoid.

Tho' having an ill-omened name,
It seemed as if they might not pain us
When first as visitors they came
And took up lodgings in the anus.

But now at each succeeding bout
The plagued pains appear distincter,
And there can be no longer doubt
Of their relations with the sphincter.

You ask me by what obvious sign
One may with certainty detect them.
Well, I can only say that mine
Are like a hornet in the rectum.

Antivenine.

Pharmaceutical Journal of Australasia.

A New Antidote for Snake Bite.—Professor Fraser, of Edinburg, has just given to the Royal Society there the results of his experiments on snake-poison (says the *Pall Mall Gazette* of the 12th June). After years of labor he has discovered a genuine antidote, which he calls antivenine. He has been collecting snake-poison from India, Africa, America, and Australia; but it was only in the end of last year that he accumulated enough to begin his systematic experiments on the lower animals. He has it in a dry and powdered form in carefully sealed little bottles. It is peculiar-looking stuff, something like brown sugar, but not so sticky. The first discovery from his careful experiments was that there is a great "toleration" for snake-poison. Having ascertained the minimum dose required to cause the death of an animal, by starting below that amount and gradually increasing his dose, leaving an interval of 10 days or a fortnight between each successive one, he got up as high as 50 times the amount of the minimum lethal dose without causing any bad effects to the animal. In fact, its general health seemed to improve, as he had the animal weighed once and sometimes twice a day; and all the time he was administering the venom there was a steady increase in weight. In the meantime, he has now carried it further than 50 times the minimum lethal dose; but still, when he has reached that point, the animal was receiving in a single dose, without being affected, enough to kill 50 animals of the same size and weight. One of the animals which he treated in this way had received enough poison to kill 370 fresh animals of an equal size and weight, supposing that each just got the minimum lethal dose. This is a very good example of "toleration." In his next series of experiments Professor Fraser used the blood serum of these animals, which had been immunized, as an antidote for the venom. He mixed equal parts of this blood serum and venom together, and injected the mixture into a fresh animal; it produced no effect. He then injected some of this blood serum into a fresh animal, and some venom afterwards, but the serum hindered any action of the venom. Next he took another animal and injected the venom first, and waited till the symptoms of poisoning began to appear, and then injected his blood serum, and this antidote put a stop to any further progress of the poisoning. This proves pretty conclusively that the antivenine or blood serum of an immunized animal is an antidote for snake-bites. At present Professor Fraser is immunizing a horse, but he has not got sufficient venom to complete the experiment. He has only nine grammes, and he still requires 30, but the Indian Government are trying hard to procure the venom for him, and he expects to have it soon. When the horse has been immunized he expects to secure enough antivenine from it to allow of its being tested chemically so as to find out the substances which antagonise the venom. When he discovers these he can prepare the antivenine chemically and send the antidote to India in small bottles. This discovery will be of very great practical importance to India, because fully 20,000 of the population are annually killed by snake-bite. The government has been trying to reduce this

mortality by offering a reward for snakes' heads; but it seems to have no effect in the way of reducing their numbers, for the natives breed the snakes in order to secure the reward. There would be quite sufficient time to administer the antivenine, as death does not ensue until from three to twenty-four hours after a bite. Professor Fraser has made a remarkable discovery, as one of the successful results of a quarter of a century's careful laboratory work.

In continuance of his investigations concerning antivenine and the production of immunity against serpents' venom, Prof. T. R. Fraser has communicated some further observations at the meeting of the Royal Society of Edinburgh, 15th July. The professor remarked that subcutaneous injection had hitherto been employed in all experiments, by which the condition of immunity had been produced in the new department of serum therapeutics. The inconveniences of this method, remarked the professor, would be avoided, were the toxic substances introduced into the system by the stomach. Experiments had shown that even large doses of serpents' venom were inert, or nearly so, when introduced into the stomach or any other part of the alimentary canal; though it was found that a certain degree of immunity was established against the toxic effects of subsequent lethal doses of venom introduced hypodermically.

These results, it was suggested, afforded an explanation of the immunity enjoyed by Indian snake charmers, since subcutaneous injection was thought unlikely to be employed by them in introducing the protection producing venom; and the experiments also suggested an explanation of the immunity possessed by venomous serpents. The antidotal properties of the blood serum of venomous serpents had been proved by an extensive series of experiments. So far, the natural antivenine obtained from the serpent was not so effective as the artificial antivenine, but it was considered probable that the value of the former might be increased, and a sufficiently powerful antivenine obtained rapidly by injecting successive doses of venom into the serpents.

Semi-Annual Diphtheria Crop.

Medical Brief.

The fall months will bring us the usual crop of diphtheria, and another vigorous attempt will be made to engraft antitoxin upon our therapeuties.

There is positively no clinical evidence upon which to base such a claim. Disinterested observers are a unit in this testimony. The majority of diphtheria patients recover, with good care, and some die, as they always have and always will. That more die, and many present symptoms of acute blood-poisoning, under the use of antitoxin, has been shown abundantly. In the face of such overwhelming testimony, it is difficult to see how any one can preserve faith in the impoverished blood serum of an animal physically depreciated by a long-continued septicemia.

It is easy to understand that German investigators are not going to rellinquish willingly a theory which has brought them, without much effort, notoriety and money, but it is almost impossible to comphrehend how American physicians, the flowers of the profession, intelligent, far-sighted, practical original, can be induced to embrace a system of therapeutics, so barren, superficial and revolting to the clean mind.

Are we hypnotized, or acquiring a mental myopia?

WANTED—A young physician who can register as a pharmacist to go to a thriving southwestern town. Good salary and steady position to right man. Address E. T. O., care KANSAS MEDICAL JOURNAL.

WE have a Yale Chair in first class condition, for sale.

WANTED—To exchange Reference Hand Book, as good as new, for Oculist's Trial Case in good condition. Address this office.

Cancer of the Stomach: Gastro Duodenostomy with the Murphy Button.

Read by R W. Stewart, M.D., Before the Alleghany Medical Society.

I here exhibit to the members of the Society a specimen of a cancer of the pyloric end of the stomach for which, on June 5, at the Mercy Hospital, I performed gastro-duodenostomy, using for the purpose a Murphy button. At the time of the operation, the patient's weakened condition precluded a pylorectomy. After thc operation, the patient rallied well: in one week he was eating solid food, and on the thirteenth day passed the button. Soon afterward he was discharged from the hospital. On July 20 the patient died, and his family phycisian, Dr. Stein. removed the specimen, which shows almost complete occlusion of the pylorus at the point of anastomosis. The most important point, however, is the marked diminution in the calibre of the anastomotic opening as compared with the size of the original button. Even if we take into consideration the shrinkage attributable to the immersion of the specimen in alcohol, it must be still admitted that there has been considerable shrinkage of the opening, a fact which seriously militates against the usefulness of the button. It should be added, however, that in this casé a prolonged operation would have been out of the question, and I am satisfied that the button anastomosis was, under the circumstances, the proper procedure to adopt.

The Bacteriology of Stomach Fermentation.

The Practitioner.

Dr. J. Kauffmann, Berlin, says: The doctrine just promulgated by Bunge, ascribing an antiseptic action to the acids of the stomach, has been so generally received that their other functions are almost cast into the shade. According to that observer, the hydrochloric acid possessed the power of destroying the micro-organisms which were introduced into the stomach by the food, and which by setting up decomposition in the alimentary canal, destroyed part of the ailment before it could be absorbed. These products when absorbed might cause troublesome symptoms, or even threaten life by setting up disease. If these statements are correct the acid of the gastric juice must be a very efficient bacterial poison. The behavior of different bacteria to hydrochloric acid was found to be very variable; some are very sensitive, a weak soluton of acid sufficing to kill; others are much more resistant. Even when their growth is arrested by a concentration of .1—.2 per cent they retain vitality. Many series of experiments have been made upon this point, and the results of the behavior of the most important bacilli shows the bacillus of Asiatic cholera to be more sensitive, that of typhoid more resistant, while tubercle and anthrax retain activity even longer. The last two form spores which do not yield to hydrochloric acid. Among the germs which produce gastric fermentation, those bacteria which decompose carbohydrates are more resistant than those which cause albuminous fermentation. Some fission fungi which produce lactic acid fermentation are acted upon with difficulty. After giving an account of the literature of the subject and of the methods of estimating the degree of fermentation, K. states that for normal circumstances Bunge's doctrine of the action of hydrochloric acid suffices; but when we come to the prevention of disease fermentation other factors must come into play, because we find not infrequently that fermentation may not take, although hydrochloric acid is absent; and, on the other hand, it may set in to a considerable degree where the acid is present in normal or even increased quantity. Of much importance in this respect is the motor activity of the stomach; and it has been shown in many cases where acid is wanting in the stomach that a compensatory factor exists in the greater activity of the stomach muscular power, which speedily passes on the food to the intestines. On the other hand, it has been proved that where there is stagnation fermentation may take

place even if free hydrochloric acid is present in lalge quantity. In all the recorded cases of pathological fermentation in markedly acid stomachs there has been dilatation with stagnation. Kaufmann cites a case, however, which shows that it does not require gastric dilatation with stagnation to permit fermentation in spite of the presence of abundant hydrochloric acid, but that rather a much smaller degree of disturbance of the motor activity is sufficient. The patient had suffered from atony of the stomach with increased secretion of acid, which was abundantly present even in the fasting state. In the stomach, the motor activity of which was only moderately impaired, and notwithstanding a large propotion of free acid, there was a considerable increase of bacteria at all times. The microscope examination always showed a bacterial fermentation, and this was confirmed by bacteriological culture. Besides the yeasts and sarcinæ and various bacilli which are inhabitants of water and readily succeed in getting into the stomach, there was a microbe resembling the bacillus coli commune which was certainly not usually met with. It differed from that bacillus in readily growing and thriving in the normal gastric juice with free hydrochloric acid. It was present at most of the examinations, even when the degree of acidity was high, and it flourished on acid ager. The chief interest of the case, however, was the existence of bacterial fermentation at the climax of digestion, even when there was a high percentage of hydrochloric acid.

Picric Acid for Burns.

Medical Times and Hospital Gazette.

French surgeons have recently been using a solution of picric acid for the first treatment of burns; and it has been found that the pain which is caused by the burning of the skin can be almost immediately alleviated, or altogether removed, by painting the affected surface with a strong solution of picric acid. It is stated that the remedy has proved to be quite harmless, and that the yellow stains, which are caused by its application, can be easily washed out with boric acid. The general verdict, of those who have employed the remedy, is that it has greatly lessened suffering, and has, therefore, probably saved life, while it would appear that even severe cases thus treated have recovered more speedily and more completely than would have been the case under other forms of treatment. It would, therefore, be well presuming that experience of the remedy in this country gives identical results, if the medical officers of factories or workshops, where accidents like burning or scalding are common occurrences, would direct that solutions of the acid should be kept at hand, and explain the method of its application to the workers.

Cure of Constipation by Forcible Dilation of the Sphincter Ani.

Maryland Medical Journal.

Dr. George L. Romine concludes an account of ten years' experience in this method of treatment as follows (*Therapeutic Gazette*): I believe that one-half of the cases have been so thoroughly cured that a dose of cathartic medicine is rarely taken, and only then through a traditional belief that such is occasionally needed. In the remaining cases patients rarely have any trouble, unless during some sickness that disturbs the regular action, and this is easily overcome by mild dosing; in fact, every case of which I have any knowledge has been benefited. After these treatments some distressing reflex symptoms disappear.

Thus, in the female, persistent occipital headache, indigestion, palpitation of the heart, are often relieved by curing constipation; while, in the male, impotence and the attendant train of symptoms indicating sexual neurasthenia are clearly recognized by specialists as frequent reflex manifestations of rectal trouble. Indeed, the importance of regular evacuations from the bowels is abundantly shown by the fact that, when called to a case, the first question asked by the physician bears upon the point. Though we are all alive to the dangers of acute con-

stipation, we are often not sufficiently alive to the far-reaching effects of this condition when it becomes chronic.

There is, however, no class of cases where, by a little attention and treatment by the regular physician, we can hope to give our patients so much relief, and last, but not least, we can save them from a worse fate—the quack!

Vaginal Resection of the Bladder.

Centralblatt fur Chirurgie.

Dr. Rehn states that in cancer of the rectum in females the affected gut can be readily removed through a vertical incision made in the middle line of the posterior wall of the vagina, and carried backward in the perineum as far as the external sphincter ani. By such an incision he was able, with very little difficulty and without much hemorrage, to remove extensive cancer from the rectum of an aged woman. The incision of the posterior wall of the vagina, he states, permits of free removal of a large malignant growth and facilitates the separation of the diseased mass from the surrounding soft parts. The rectum having been plugged with antiseptic gauze and the vagina thoroughly disinfected, the posterior vaginal wall is carefully incised and separated from the diseased gut. The perineum is next incised in the middle line and the rectum below the seat of disease isolated, ligatured, and divided. The upper and cancerous portion of the gut is now drawn through the vaginal wound and excised. This stage of the operation, it is asserted, can be effected with but little hemorrhage and with free exposure of the diseased structures. An opening in the peritoneum can be readily dealt with in this operation, and any enlarged glands in the meso-rectum can be removed without difficulty.

THE Kaw Pharmacal Co. have some samples of Guaiacoline that they would like to send you.

Pyopneumothorax.

W. C. L. Carr, Archives of Pedriatics.

Child, aged 10 months, was admitted November 17th into St. Mary's Free Hospital for Children, with a history of fever and a hacking cough for two weeks. Examination showed respiration oppressive and 80 per minute, right side fuller than left apparently, but no bulging in the inter-costal spaces, left chest more movable on respiration, tumor in fifth inter-costal space, extending from axillary line to angle of scapula; anteriorly on right side percussion note tympanitic to lower border of eighth rib; hepatic dullness three inches below free border of ribs. Auscultation reveals absence of normal respiratory sounds on right side, amphoric breathing anteriorly and indistinct bronchial breathing between scapula and spine; friction sounds over base of right lung, increased by pressure on the tumor; impossible to produce succussion and metallic tinkling; exaggerated respiration over left lung. Temperature 101° F., in the rectum, pulse 160, respiration 80. Firm pressure was made over tumor by a gauze compress and rubber plaster, which produced more comfort and less laborious breathing. Examination of sputa revealed streptococci, but no tubercle bacilli or shreds of lung tissue. It is probable that the child had an empyema, which had ruptured and discharged itself through the lung. In March, 1895, the baby was in good health, and, friction sounds at the base of the right lung, showed no evidence of the disease. The case is of interest, chiefly because succussion and metallic tinkling, which are given in text-books as physical signs of pathognomonic importance could not be elicited.

A Remedy for Dandruff.

Louisville Medical Monthly.

Having suffered much inconvenience from dandruff, and having resorted to many advertised nostrums and other means for relief, among which were various alcoholic solu-

tions of castor oil, and washing the scalp with solutions of borax and carbonate of potassa, which latter, although effectual from the relief of the dandruff, seemed to impair the vitality of the hair, and cause it to become very sensibly thinner, was finally induced, from my knowledge of the frequent efficacy of sulphur in certain cutaneous affections, to try a preparation of an ounce of the flowers of sulphur in a quart of water, as follows, with the happiest result: The sulphur was repeatedly agitated in the water during intervals of a few hours, and the clear liquid then poured off, with which the head was saturated every morning. In a few weeks every trace of dandruff had disappeared, and the hair became soft and glossy. After discontinuing the treatment for eighteen months there is no return of the disease. The remedy is highly recommended.

Vin Mariani and the Dispensary Law.

The dispensary law in South Carolina has of late been so rigidly enforced that many druggists were afraid to sell even medicinal preparations containing wine as one of the constituent parts. This seriously interfered with the sales of the well known tonic Vin Mariani throughout South Carolina, and the proprietors of that famous specialty made vigorous representations to the Governor on the subject. As a result of these representations, Vin Mariani has been especially exempted from the workings of the dispensary law, as is shown by the following letter received by Messrs. Mariani & Co. from Gov. Evans:

(Copy.)

STATE OF SOUTH CAROLINA,
EXECUTIVE DEPARTMENT,
OFFICE OF STATE BOARD OF CONTROL,
COLUMBIA, S. C., Oct. 5, 1895.

Mariani & Co., 52 West Fifteenth street, New York.

Dear Sirs—In reply to your favor of 30th ult., Gov. Evans directs me to say that you have his permission to sell the Vin Mariani and he will exempt it from seizure in the State when not sold as a beverage.

Respectfully,
W. W. HARRIS, *Clerk S. B. C.*

Case I.

The Mercer Chemical Co., Omaha, Neb.:

GOTHENBURG, NEB., October 25, 1894.—*Dear Sirs:* Mr. W——, aged 30, married over two years. Since having an attack of paralysis of the left side has suffered complete impotence—I say complete advisedly, as he has not experienced in all that time even a partial erection. But I must confess my great surprise and satisfaction after 24 days' treatment with your Pill Vita (Blue) to have the patient report himself entirely cured, and the vercict—guilty of using Mercer's Pill Vita (Blue)—has created happiness and reunited a happy couple. Respectfully,

DR. W. P. SMITH,
Ass't Surg U. P. Ry.

Great Success in England.

J. A. DeC. Williams. A·M., M.B., L.E.R. C.P.J., Killucan county, West Meath, England, writes: "I have much pleasure in informing you that I have obtained more than the average success met with in drugs when I used PIL. APHRODISIACA (LILLY). more especially in cases of nervous prostration and sexual debility, patients often wishing to continue the pills after cure, they are so pleased with their effectiveness."

Why Remove the Testicles?

The Medical Age.

Doctor J. T. Jelks says: "In view of the fact that in operating for senile cystitis the relief obtained comes from the effect on the nerve, and and not from the removal of the testicles themselves, I favor resection of the nerve which lies in the spermatic cord. I believe in saving the testicles in every case, if possible, for, while they may have ceased to be useful, they may still be considered by their owner as ornamental."